

ABSTRACT

DEVICE FOR DETECTING ELECTROMAGNETIC RADIATIONS

This device for detecting electromagnetic radiations, and in particular infrared radiations, implements a detection circuit associated with a reading circuit, the detection circuit consisting of an array of detection pixels (1), each of the said pixels consisting of a thermal detector of biased (3) bolometric type (2), and delivering an electric current representative of the detected radiation, the said current undergoing a double baselining, respectively:

- a global baselining carried out by means of a thermally isolated bolometer (8), ensuring the extraction from the said electric current, of a first current of constant value inherent to the biasing of the said thermal detector (2),
- an adaptive baselining specific to each of the pixels (1), carried out by means of a programmable current generator (9), specific to each of the pixels, generating a current for subtraction from the said signal, as a function of the dispersion inherent to the pixel considered relative to a reference signal and stored in an associated memory.

The said associated memory is integrated at the level of each of the said pixels.

Figure 4